Listing of Claims

1. (original) A compound of the formula

$$R_{5}$$
 R_{2}
 R_{7}
 R_{1}
 R_{3}
 R_{1}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{7}
 R_{1}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{5}
 R_{5}
 R_{5}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{5}
 R_{5}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{5}
 R_{5}
 R_{7}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{5}
 R_{7}
 R_{7}
 R_{7}
 R_{8}
 R_{8}
 R_{9}
 R_{1}
 R_{2}
 R_{3}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{5}
 R_{7}
 R_{7}
 R_{7}
 R_{8}
 R_{8}
 R_{9}
 R_{1}
 R_{2}
 R_{3}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{7}
 R_{8}
 R_{9}
 R_{1}
 R_{2}
 R_{3}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{7}
 R_{8}
 R_{8}
 R_{9}
 R_{1}
 R_{2}
 R_{3}
 R_{3}
 R_{4}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{7}
 R_{8}
 R_{8}
 R_{9}
 R_{1}
 R_{2}
 R_{3}
 R_{3}
 R_{4}
 R_{4}
 R_{5}
 R_{5}
 R_{5}
 R_{7}
 R_{8}
 R_{8}
 R_{8}
 R_{8}
 R_{8}
 R_{9}
 R_{1}
 R_{2}
 R_{3}
 R_{3}
 R_{4}
 R_{4}
 R_{5}
 R_{5

wherein

R₁ is optionally substituted lower alkyl or aralkyl;

R₂ is optionally substituted lower alkyl;

R₃ and R₄ are independently hydrogen, halo, lower alkyl, alkoxy or trifluoromethyl; or

R₃ and R₄ combined together with the carbon atoms to which they are attached form an optionally substituted fused 6-membered aromatic ring provided that R₃ and R₄ are attached to carbon atoms adjacent to each other;

R₅ is hydrogen, lower alkyl, lower alkoxy or halo;

R₆ and R₇ are hydrogen; or

 R_6 and R_7 combined together with the carbon atoms to which they are attached form a fused 6-membered aromatic ring;

provided that

- (i) R_3 , R_4 , R_5 , R_6 and R_7 are not hydrogen when R_1 is methyl, ethyl, pentyl, allyl, 3-buten-1-yl, benzyl or phenethyl and R_2 is methyl; or
- (ii) R_3 , R_4 , R_6 and R_7 are not hydrogen when R_1 and R_2 are methyl and R_5 is methyl located at the 4-position;

or an enantiomer thereof; or an enantiomeric mixture thereof.

2. (original) A compound according to claim 1, wherein

 R_3 and R_4 combined together with the carbon atoms to which they are attached form an optionally substituted fused 6-membered aromatic ring provided that R_3 and R_4 are attached to carbon atoms adjacent to each other;

or an enantiomer thereof; or an enantiomeric mixture thereof.

3. (original) A compound according to claim 2 of the formula

$$R_5$$
 R_2
 R_7
 R_1
 R_1
 R_1
 R_1
 R_2
 R_3
 R_4
 R_5
 R_7
 R_1
 R_1
 R_2
 R_3
 R_4
 R_5
 R_7
 R_1
 R_1

wherein

R₁ is optionally substituted C₁₋₄alkyl;

R₂ is methyl;

R₅ is hydrogen;

R₆ and R₇ are hydrogen; or

 R_6 and R_7 combined together with the carbon atoms to which they are attached form a fused 6-membered aromatic ring;

or an enantiomer thereof; or an enantiomeric mixture thereof.

4. (original) A compound according to claim 3, wherein

R₆ and R₇ are hydrogen;

or an enantiomer thereof; or an enantiomeric mixture thereof.

5. (original) A compound according to claim 4, wherein

R₁ is methyl;

or an enantiomer thereof; or an enantiomeric mixture thereof.

6. (original) A method for converting a carbonyl compound to a chiral alcohol in the presence of a suitable organozinc reagent and a compound of the formula

$$R_{5}$$
 R_{2}
 R_{7}
 R_{1}
 R_{3}
 R_{1}
 R_{1}
 R_{2}
 R_{3}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{7}
 R_{1}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{5}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{5}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{5}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{5}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{5}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{5}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{5}
 R_{7}
 R_{7}
 R_{8}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{7}
 R_{8}
 R_{7}
 R_{8}
 R_{8

wherein

R₁ is optionally substituted lower alkyl or aralkyl;

R₂ is optionally substituted lower alkyl;

R₃ and R₄ are independently hydrogen, halo, lower alkyl, alkoxy or trifluoromethyl; or

 R_3 and R_4 combined together with the carbon atoms to which they are attached form an optionally substituted fused 6-membered aromatic ring provided that R_3 and R_4 are attached to carbon atoms adjacent to each other;

R₅ is hydrogen, lower alkyl, lower alkoxy or halo;

R₆ and R₇ are hydrogen; or

 $\ensuremath{\mathsf{R}}_6$ and $\ensuremath{\mathsf{R}}_7$ combined together with the carbon atoms to which they are attached form a fused 6-membered aromatic ring;

provided that

- (i) R_3 , R_4 , R_5 , R_6 and R_7 are not hydrogen when R_1 is methyl, ethyl, pentyl, allyl, 3-buten-1-yl, benzyl or phenethyl and R_2 is methyl; or
- (ii) R_3 , R_4 , R_6 and R_7 are not hydrogen when R_1 and R_2 are methyl and R_5 is methyl located at the 4-position;

or an enantiomer thereof; or an enantiomeric mixture thereof.

7. (original) A method according to claim 6, wherein

R₃ and R₄ combined together with the carbon atoms to which they are attached form an optionally substituted fused 6-membered aromatic ring provided that R₃ and R₄ are attached to carbon atoms adjacent to each other;

or an enantiomer thereof; or an enantiomeric mixture thereof.

8. (original) A method according to claim 7, wherein a compound of formula (I) has the formula

$$R_5$$
 R_2
 R_7
 R_1
 R_1
 R_1
 R_1
 R_2
 R_1
 R_2
 R_1
 R_2
 R_3
 R_4
 R_5
 R_7
 R_1
 R_1
 R_2
 R_3
 R_4
 R_7
 R_1
 R_1
 R_2
 R_3
 R_4
 R_5
 R_7
 R_7

wherein

R₁ is optionally substituted C₁₋₄alkyl;

R₂ is methyl;

R₅ is hydrogen;

R₆ and R₇ are hydrogen; or

 R_6 and R_7 combined together with the carbon atoms to which they are attached form a fused 6-membered aromatic ring;

or an enantiomer thereof; or an enantiomeric mixture thereof.

9. (original) A method according to claim 8, wherein

R₆ and R₇ are hydrogen;

or an enantiomer thereof; or an enantiomeric mixture thereof.

10. (original) A method according to claim 9, wherein

R₁ is methyl;

or an enantiomer thereof; or an enantiomeric mixture thereof.

- 11. (original) A method according to claim 6, wherein the carbonyl compound is an aromatic aldehyde.
- 12. (original) A method according to claim 11, wherein the chiral alcohol is a diarylmethanol.
- 13. (original) A method according to claim 12, wherein the organozinc reagent is generated by reacting a compound of the formula

$$R_8B(OH)_2$$
 (V)

wherein R₈ represents aryl; with dimethyl zinc or diethyl zinc.

- 14. (original) A method according to claim 12, wherein the reaction mixture further comprises a polyether.
- 15. (original) A method according to claim 14, wherein the polyether is dimethoxypolyethylene glycol.
- 16. (original) A method according to claim 12, wherein

 R_3 and R_4 combined together with the carbon atoms to which they are attached form an optionally substituted fused 6-membered aromatic ring provided that R_3 and R_4 are attached to carbon atoms adjacent to each other;

or an enantiomer thereof; or an enantiomeric mixture thereof.

17. (original) A method according to claim 16, wherein a compound of formula (I) has the formula

$$R_5$$
 R_2
 R_7
 R_1
 R_6
 R_7
 R_1
 R_1
 R_2
 R_1
 R_2
 R_3
 R_4
 R_5
 R_7
 R_1
 R_2
 R_4
 R_7
 R_7
 R_1

wherein

R₁ is optionally substituted C₁₋₄alkyl;

R₂ is methyl;

R₅ is hydrogen;

R₆ and R₇ are hydrogen; or

 R_6 and R_7 combined together with the carbon atoms to which they are attached form a fused 6-membered aromatic ring;

or an enantiomer thereof; or an enantiomeric mixture thereof.

18. (original) A method according to claim 17, wherein

R₆ and R₇ are hydrogen;

or an enantiomer thereof; or an enantiomeric mixture thereof.

19. (original) A method according to claim 18, wherein

R₁ is methyl;

or an enantiomer thereof; or an enantiomeric mixture thereof.

- 20. (original) A method according to claim 6, wherein the reaction mixture further comprises a polyether.
- 21. (original) A method according to claim 18, wherein the polyether is dimethoxypolyethylene glycol.